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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/584,866	06/28/2006	Sang Doo Kim	3449-0649PUS1	7783
2292 7590 06/25/2009 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
EXAMINER LU, JIPING				
ART UNIT 3743		PAPER NUMBER		
NOTIFICATION DATE 06/25/2009		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/584,866

Applicant(s)

KIM, SANG DOO

Examiner

Jiping Lu

Art Unit

3743

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12, 13 and 16 is/are rejected.
- 7) ☒ Claim(s) 11, 14 and 15 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____
- Paper No(s)/Mail Date ____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-3, 5-10, 12, 13, 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Souza (U. S. Pat. 5,649,372).

Souza discloses a drying apparatus where a humidity sensor 36 is located in the exhaust outlet 9 of the drying chamber 1. FIGS. 4, 5, 6, 7, 8 illustrate the programming steps executed by electronic controller 13. The start command is entered through the keyboard 29 of the electronic controller. The blower 11 and motor 25 are activated in step 52 to begin the drying process. The display 31 displays a material type entered through keyboard 29 being dried within the drying chamber 1. A relative humidity is determined. During the time the relative humidity monitored by the sensor 36 is continuously measured. Once the final relative humidity within the drying chamber 1 has been found to equal the final relative humidity RH LO in decision block 81, heating is discontinued in step 86 and a cool down time cycle for the dryer is entered.

3. Claims 1, 3, 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Akabane et al. (EP 0481442 A2).

Akabane et al. disclose a washing/drying machine and a method of controlling the same with a control panel 6 having various control keys and a program display 7. A humidity sensor 67 is placed inside the condenser.

4. Claims 1, 7, 8 are rejected under 35 U.S.C. 102(c) as being anticipated by Park (U. S. Pat. 6,983,552).

Park discloses a laundry drier and a control method thereof by which the heater is driven in a step S401 for a predetermined time (t_1). While the heater is thus driven, a level of moisture is sensed in a step S403, which is converted into a voltage and is stored in the memory 800 in a step S404. The stored voltage value is compared to a predetermined value, in a step S405. If the stored voltage value reaches or exceeds the predetermined value, it is determined that the drying procedure is completed and heating is stopped in a step S406. On the other hand, if after the predetermined time the stored voltage value is still less than the predetermined value, it is determined that the drying procedure may be incomplete. Accordingly, in steps S407, S408, and S409, a new voltage value corresponding to a subsequent (t_2) sensing of moisture is obtained for further comparison in a step S410.

5. Claims 1, 2, 7-10, 12, 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Yang (U. S. pat. 6,931,760).

Yang shows in Fig. 2 a dryer control method in which the controller 103 periodically detects the output voltage of the moisture sensor 102 through steps S202 and S203, to determine whether the output voltage reaches the first predetermined voltage (V_1), at which time the timer 101 is begun. Then, through steps S204 and S205, the time taken for the output voltage of the moisture sensor 102 to reach the second predetermined voltage (V_2) is measured. Upon reaching

the second predetermined voltage the measured time AT can be known. The drying time t is computed by $t = C1 + C2 * \Delta T$, where C1 is a constant and C2 is a constant corresponding to the selected dryness level per laundry type, in a step S206. The drying operation is completed in a step S207 by continuing to drive the drying unit 105 until the computed time expires.

Allowable Subject Matter

6. Claims 11, 14, 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jiping Lu whose telephone number is 571 272 4878. The examiner can normally be reached on Monday-Friday, 9:00 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, KENNETH RINEHART can be reached on 571-272-4881. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jiping Lu/
Primary Examiner
Art Unit 3743

J. L.